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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/676,297

09/30/2003

Emerson P. Jones

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EXAMINER

ALI, HATEM M

ART UNIT

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3691

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/676,297	JONES ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	HATEM ALI	3691	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 March 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on **3/16/2010** has been entered.

2. The following is **an Office Action** on merits in response to a communication received on **3/16/2010**.

### ***Acknowledgement***

3. Claim **status**:

- Claim **amended**: 1
- Claims **pending**: 1-10

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-10** are rejected under 35 U.S.C. 103 (a) as being unpatentable over *Ichihari et al* (2003/0046203) in view of *Vass* (US 7,251,627).

**As per claim 1**, *Ichihari* discloses a method implemented by a programmed computer system (**para 0090-0092** and **Fig.13**; via computer system [**para 0033**]) comprising:

each changed debt/equity ratio value is an output of one or more simulations (**para 0062-0063**; via an enterprise makes loss as a result of volatility of earnings by a business risk [implied reiteration of stock prices resulting repeated change of debt/equity ratio] and [**para 0089+**; via implied and **inherent** simulation method in **Monte Carlo** simulation system);

calculating, with the computer system, values of earnings per share associated with the entity based at least in part upon the iteratively changed values of the debt/equity ratio outputted in the one or more simulations and associated with the entity (**para 0081**; via step **108** in **Fig.1**)

calculating, with the computer system, a plurality of values of earnings per share risk associated with the entity based at least in part upon the iteratively changed values of the debt/equity ratio associated with the entity (**para 0061**; via step **106** in **Fig.1**);

recording, with the computer system the calculated earnings per share values associated with the entity and the calculated earnings per share risk values associated with the entity (**para 0091** and **0095**; via all calculated data are recorded and stored in data files **180-190**); and

Outputting, with the computer system, the calculated earnings per share values associated with the entity and the recorded calculated earnings per share values associated with the entity and the recorded calculated earnings per share risks values associated with the entity (**para 0091 and 0095**; via all calculated data are recorded and stored in data files **180-190** [implied output after calculation of data]);

wherein the recorded calculated earning per share values associated with the entity and the recorded calculated earnings per share risk values associated with the entity characterize a capital structure of the entity in connection with a cost to the entity of a selected debt/equity ratio relative to a risk associated with the selected debt/equity ratio (**para 0090-0092 and Fig.13**; via computer system and enterprise as entity and **para 0062-0063**; via an enterprise makes loss as a result of volatility of earnings by a business risk related to inherent reiterative changes of stock prices resulting uncertain debt/equity ratio)

**Ichihari** fails explicitly to disclose iteratively changing, with the computer system, a value of a debt / equity ratio associated with the entity.

However, **Vass** being in the same field of invention discloses iteratively changing, the computer system, a value of a debt / equity ratio associated with the entity (**col.4**, lines 9-13 and 50-54; via inherent and implied **NYSE's** reiteratively changes of stock prices resulting debt / equity ratio change for all stocks. Accordingly scanning the stocks of the initial universe and attention is paid to the debt to equity ratio of each stock with program setting a threshold for the debt/equity ratio of 20% or less).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify the disclosure and features mentioned by **Ichihari** to include the features as taught by **Vass** to facilitate the proper selection of stocks into the universe.

**As per claim 2, Ichihari** discloses that the entity is a public corporation (para **0033**; via to measure performance of an entire enterprise, public entity).

**As per claim 3, Ichihari** discloses, at least one of the calculated earnings per share values and the calculated earnings per share risk values is applied to a financial presentation relating to at least one of a balance sheet and an earnings per share metric (para **0091** and **0100**; via earning per share [as **MEVA**] calculation and storing and display inherently data may be shown in spreadsheet for presentation).

**As per claim 4, Ichihari** discloses that the iterations and calculations are carried out at least in part using a Monte Carlo simulation (para **0089**; via performing the Monte Carlo Simulation).

**As per claim 5, Ichihari** discloses that the outputted calculated earnings per share values and the outputted calculated earnings per share risk values are plotted against one another (para **0059, 0060** and **Fig.5**).

**As per claim 6, Ichihari** discloses that the plot of calculated earnings per share values versus calculated earnings per share risk values is credit adjusted (para **0052-0054** and **Fig.3**).

**As per claims 7 and 9, Ichihari** discloses the steps further comprising:

Art Unit: 3691

obtaining, with the computer system, data associated with the entity including a number of common shares outstanding, a value of earnings, a value of dividends per share, a change in the effective number of common shares outstanding, which change in the effective number of common shares outstanding reflects the possibility, based upon an economically reasonable analysis in light of market conditions, of conversion of a convertible security; and a value of coupon payments;

wherein each value of earnings per share is calculated at least in part using the formula

$$\text{EPS} = \text{DPS}_o + (\text{Earnings} - N_o \times \text{DPS}_o - \text{Coupon}) / N_o + \Delta N_{\text{eff}}$$

wherein :

1) Earnings equals the input value of earnings, ii)  $N_o$  equals the input number of common shares outstanding, iii)  $\text{DPS}_o$  equals the input value of dividends per share, iv) Coupon equals the input value of coupon payments, and v)  $\Delta N_{\text{eff}}$  equals the input value of change in the effective number of common shares outstanding, based at least in part upon each of a plurality of iteratively changed values of stock price associated with the entity (**para 0033-0039**; via identical expression of **EPS** or earnings of an enterprise with shares or Market efficiency value added = Net operating profit after Tax- Cost of Capital)

**As per claims 8 and 10, *Ichihari*** discloses that the economically reasonable analysis in light of market conditions takes into account a conversion premium associated with the convertible security (**para 0095-96**; via analysis with historical and

simulation methods and market condition with **ROI** data).

### ***Response to Arguments***

6. **Applicant's** arguments filed **3/16/2010** have been fully considered but they are not persuasive.

In the Remarks Applicant argues in substance that:

(a) Applicant disagrees with the Examiner's characterization of the cited reference.

In direct **contrast** to the Examiner's assertions, Applicant submits that Ichihari discusses quite the **opposite**, i.e.: calculating debt/equity ratio based on **earnings values**. For example, unlike the claimed "... debt/equity ratio value is an output of one or more simulations," Ichihari discusses: "the required capital composition (the optimum debt/equity ratio) of the invested capital can be obtained from the earnings probability distribution," (Ichihari, page 3, paragraph [0065]). Also, unlike the claimed "calculating, ... earnings per share..., based..., upon..., the debt/equity ratio... ," in Ichihari,

Monte Carlo simulation..., will allow the profit [i.e.: earnings] to be corrected by volatilities in the exchange rate and commodity prices and produce an output of a graph as shown in Fig. 10 that shows the probability distribution with respect to the profit absolute value; (Ichihari, page 5, paragraph [0089]).

Accordingly, Applicant submits that Ichihari's calculating debt/equity ratio based on earnings values is different from at least the claimed "calculating, ... earnings per share ... based..., upon..., the debt/equity ratio... ," as recited in claim 1. Similarly,



Art Unit: 3691

Applicant submits that Vass's method of calculating real non-simulated debt to equity ratios fails to remedy the deficiencies identified above in Ichihari with regard to independent claim 1. For at least the reasons discussed above, Applicant submits that the pending rejection has mischaracterized the language of the claim element and/or the applied reference(s) and, thus, has not established a prima-facie case of obviousness.

In response to (a):

The Examiner respectfully disagrees with applicant's assertion. In addition to Ichihari, please see Vass [col4, 55+] where program looks to determine if a stock has rising or stable sales, profits and profits per share ... period. Again if any stock selected into the initial universe is found to have **declining** sale, profits or profits per share ... then that stock is **not** selected into the final universe

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

***Slyke et al*** (2002/0042770) discloses Liquid Insurance Contracts.

***Makivic*** (6,061,662) discloses the valuation of derivative financial instruments.

***Squyres*** (7,222,095) discloses Method and System for comparison and evaluation of investment Portfolio.

Art Unit: 3691

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HATEM ALI whose telephone number is (571)270-3021.

The examiner can normally be reached on 8.00 to 6.30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ALEXANDER KALINOWSKI can be reached on 571-272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HATEM ALI  
Examiner  
Art Unit 3691

/Hani M. Kazimi/  
Primary Examiner, Art Unit 3691